



WILDEARTH GUARDIANS  
SAN JUAN CITIZENS ALLIANCE

185 IBLA 193

Decided January 30, 2015



United States Department of the Interior  
Office of Hearings and Appeals

Interior Board of Land Appeals  
801 N. Quincy St., Suite 300  
Arlington, VA 22203

WILDEARTH GUARDIANS  
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IBLA 2013-34

Decided January 30, 2015

Appeal from a decision of the Associate Deputy State Director, Division of Minerals, New Mexico State Office, Bureau of Land Management (BLM), upholding, on State Director Review, a Decision Record and Finding of No Significant Impact issued by the District Manager, Farmington (New Mexico) District Office, BLM, approving the Middle Mesa Plan of Development. SDR 2012-03.

Affirmed.

1. Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--National Environmental Policy Act of 1969: Environmental Assessments--Oil and Gas Leases: Drilling

The Bureau of Land Management (BLM) will be deemed to have satisfied the requirements of section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4332(2)(C) (2006), where, in addressing the likely significant air quality impacts of approving the development of oil and gas wells under a Plan of Development (POD), BLM properly relied, in its Environmental Assessment (EA), on a Resource Management Plan (RMP) Environmental Impact Statement (EIS), that addressed a reasonably foreseeable development scenario for the RMP planning area, where the proposed wells are within the level of activity envisioned in the scenario. An appellant challenging the adequacy of the EA, tiered to the EIS, will not be deemed to have established a NEPA violation where it fails to carry its burden to demonstrate, with objective proof, that the EIS is out-dated or underestimates likely gaseous emissions, or that BLM improperly deferred its consideration of likely impacts until after the submission of Applications for Permits to Drill (APDs) for the wells.

2. Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--National Environmental Policy Act of 1969: Environmental Assessments--Oil and Gas Leases: Drilling

In addressing the likely significant air quality impacts of approving oil and gas development, BLM is not required by 40 C.F.R. § 1502.9(c), to supplement the EIS, to which its EA is tiered, when, following issuance of the EIS, applicable ambient air quality standards were changed, since such a change does not mean that the development is likely to affect the environment in a significant manner or to a significant extent not envisioned in the EIS, especially where, during the APD approval process, BLM has provided for ensuring compliance by monitoring and adoption, of appropriate measures to achieve compliance, and development efforts will be subject to State air quality permitting and enforcement, under the oversight of the U.S. Environmental Protection Agency.

3. Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--National Environmental Policy Act of 1969: Environmental Assessments--Oil and Gas Leases: Drilling

BLM is not required by section 102(2)(E) of NEPA, 42 U.S.C. § 4332(2)(E) (2006), to address in an EA, tiered to an EIS, the alternative of not undertaking any oil and gas development under a POD, when, at the time of preparation of the EA and EIS, the public lands at issue had already been leased, which ensured that development would occur, and, consequently, in considering the no action alternative, BLM properly addressed the likely development that would happen in the absence of approval of the POD.

4. Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--National Environmental Policy Act of 1969: Environmental Assessments--Oil and Gas Leases: Drilling

BLM is not required by 40 C.F.R. § 1502.9(c) to supplement the EIS, to which its EA is tiered, where BLM already considered the likely significant air quality impacts of approving oil and gas development, whether by means of vertical drilling or by means of horizontal drilling, accompanied by hydraulic fracturing, and the appellant fails to carry its burden to demonstrate, with objective proof, any error or deficiency in BLM's analysis of such impacts.

5. Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--National Environmental Policy Act of 1969: Environmental Assessments--Oil and Gas Leases: Drilling

BLM is not required by section 202(c) of FLPMA, 43 U.S.C. § 1712(c) (2006), to ensure compliance with Federal and State air quality standards, but may be required by the applicable land-use plan promulgated pursuant to that statutory provision to ensure compliance, when it approves oil and gas development. When the applicable land-use plan requires compliance, BLM may properly conform to the plan by relying on State air quality permitting and enforcement, subject to EPA oversight, to achieve compliance with air quality standards

APPEARANCES: Samantha Ruscavage-Barz, Esq, Santa Fe, New Mexico, for appellant; Lisa A. Decker, Esq., Denver, Colorado, and Lloyd W. Landreth, Esq., Jenks, Oregon, for intervenor; Michael C. Williams, Esq., Office of the Field Solicitor, U.S. Department of the Interior, Santa Fe, New Mexico, and Theresa Copeland, Esq., Office of the Regional Solicitor, Albuquerque, New Mexico, for the Bureau of Land Management.

#### OPINION BY ADMINISTRATIVE JUDGE KALAVRITINOS

WildEarth Guardians and San Juan Citizens Alliance (collectively, WildEarth) have appealed from a November 6, 2012, decision of the Associate Deputy State Director, Division of Minerals, New Mexico State Office, Bureau of Land Management (BLM), upholding, on State Director Review (SDR), the December 1, 2011, Decision Record (DR) and Finding of No Significant Impact (FONSI) issued by the District

Manager, Farmington (New Mexico) District Office, BLM. The DR and FONSI approved the Middle Mesa Plan of Development (POD) of WPX Energy Production, LLC (WPX).<sup>1</sup> The POD provided for drilling and developing 53 natural gas wells in the Mancos Shale formation in the San Juan Basin of northern New Mexico. The DR and FONSI were based on a November 30, 2011, Environmental Assessment (EA) (DOI-BLM-NM-FO10-2011-254), prepared pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4332(2)(C) (2006), and its implementing regulations, 40 C.F.R. §§ 1500.1-1518.4.

As discussed below, WildEarth has failed to establish any error of fact or law, and, therefore, we will affirm BLM's decision to approve the POD.

### *Background*

On April 14, 2011, WPX proposed a POD that would provide for the year-round drilling and development of 53 natural gas wells, using 8 well pads and 2 stimulation pads, over the course of 5 years, on Federally-leased lands in secs. 4, 9, 16, and 17, T. 31 N., R. 6 W., and sec. 33, T. 32 N., R. 6 W., New Mexico Principal Meridian, San Juan County, New Mexico, within the 5,700-acre Middle Mesa portion of the Rosa Unit.<sup>2</sup> See generally EA at 1, 10-16, 70; EA at Figure 3 (Project Area Map); Proposal for Rosa Middle Mesa Development, dated Apr. 14, 2011 (Administrative Record (AR) 1291-1319), at 1-2, 4-7; BLM Meeting Record, dated Apr. 14, 2011 (AR 1360-61), at 1.<sup>3</sup> The POD would result in full-field development

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<sup>1</sup> By order dated Dec. 11, 2012, the Board granted WPX's motion to intervene in the pending appeal. WPX is the former Williams Production Company, LLC.

<sup>2</sup> WPX states that the Middle Mesa area has been leased for oil and gas exploration and production purposes "since the 1940's." Answer at 3. WPX currently holds five leases that date from 1948, when they were also unitized. See EA at 1, 47.

<sup>3</sup> WildEarth notes that the POD constitutes the "first drilling project" approved by Farmington BLM "that authorizes commercial development of natural gas within the Mancos shale." Notice of Appeal and Statement of Reasons (NA/SOR) at 2. However, WPX also notes that, "[w]hile the Mancos Shale in the Rosa Unit area . . . may not have been produced from on a regular basis, there are at least 61 other Rosa Unit shale wells that are *currently* producing natural gas and oil." Answer at 24, emphasis added.

of the Mancos Shale formation in the Middle Mesa portion of the Rosa Unit, producing an estimated 275 billion cubic feet (bcf) of natural gas.<sup>4</sup>

WPX would use a natural gas-powered custom-built drilling rig that could be moved from one well pad to the next using temporary tracks, rather than being disassembled and reassembled. WPX would engage in the horizontal drilling of multiple wells from single well pads, thus allowing it to maximize the production of natural gas, while minimizing the number of well pads and associated surface disturbance in the case of vertical drilling. The well pads and related facilities would be located on areas of existing surface disturbance. Each of the wells would be drilled vertically to an average depth of approximately 6,700 feet in the Mancos Shale formation, and then horizontally an average distance of approximately 5,200 feet through the formation. Drilling operations were expected to last approximately 10 months on each well pad, followed by reclamation of the pad and associated facilities, either partial, in the event of production, or full. All drilling and development activities would be completed within 5 years, followed by the production of any natural gas encountered during drilling.

Once encountered, the natural gas deposits would be produced using a stimulation method known as hydraulic fracturing (fracking). Chemical fluids, together with water from holding ponds on the stimulation pads, would be injected, at intervals of approximately 500 feet along the 5,200-foot long horizontal well bore, under high pressure into the formation, in order to fracture and keep open the formation, thereby releasing the natural gas, which would be recovered from the fluids. The 53 wells were expected to result in a total of 636 stimulations, given an

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<sup>4</sup> The POD would also provide for temporarily lifting the seasonal timing limitation (STL), which normally precludes the drilling of any oil and gas wells during the period from December 1 through March 31 of each year, in order to protect mule deer and elk winter range. However, WPX would be restricted to drilling on one well pad and one well rig move, during the December 1/March 31 time period. The STL was provided for in the applicable land-use plan (December 2003 Farmington Resource Management Plan (RMP)). See Record of Decision (ROD), Farmington RMP, dated Sept. 29, 2003, Appendix B (Oil and Gas Leasing Stipulations Applied to New Leases in Planning Area), at B-2; RMP at 2-3; EA at 60. The ROD also provided that the STL could be “waived, excepted, or modified” if oil and gas operations could be undertaken “without causing unacceptable impacts” to the big game and their winter range, Appendix B, at B-3.

The POD would also provide for directionally drilling and developing 12 natural gas wells using the same well pads. See EA at 11; DR at 1. WildEarth does not challenge this part of the DR.

anticipated 12 stimulations per well. Further, since approximately 10,000 barrels (or 420,000 gallons) of chemical fluid would be injected in the case of each stimulation, a total of 120,000 barrels (or over 5 million gallons) of fluid would be injected in the case of each well, or over 6.3 million barrels (or over 267 million gallons) of fluid for all 53 wells.

BLM assembled an interdisciplinary team of resource specialists for the purpose of reviewing the proposed POD, and, following a scoping and environmental review process that began on April 26, 2011, issued a draft EA for a 30-day public comment period on August 30, 2011. Following the submission of comments by WildEarth and other members of the public, BLM issued the final EA on November 30, 2011, followed by the DR and FONSI.<sup>5</sup>

In its EA, BLM addressed the potential environmental impacts of the proposed POD (Alternative B) and a no action alternative (Alternative A). Under the no action alternative, WPX could continue to exercise its existing oil and gas lease rights, and thus, subject to BLM's approval, could continue to drill and develop the Mancos Shale formation at the existing 80-acre State spacing, using vertical and directional drilling, but adhering to the STL. See EA at 10, 47-50; Decision at 3.

The EA was tiered to the Final Environmental Impact Statement (FEIS) that was prepared in connection with promulgation of the December 2003 Farmington RMP.<sup>6</sup> See EA at 3. In the FEIS, BLM had addressed, *inter alia*, the likely significant environmental impacts of a Reasonably Foreseeable Development Scenario (RFDS). See Proposed RMP and FEIS, Volume I, dated March 2003, at 4-1 ("The primary impacts in the planning area would be due to projected increases in oil and gas activities[.] . . . The evaluation of these impacts is based on the number of wells and associated infrastructure projected over the next twenty years in the RFDS[.]") (Emphasis added). The RFDS was identified in a July 2, 2001, report (attached to the Proposed RMP and FEIS), entitled "Oil & Gas Resource Development for San Juan Basin, New Mexico: A 20-year Reasonably Foreseeable Development (RFD) Scenario Supporting the RMP for the Farmington Field Office, BLM" (NMIMT Report), which

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<sup>5</sup> Included in the EA, as Appendix C (30-Day Comment Response Matrix), was a summary of all of the relevant public comments, along with BLM's corresponding responses and any action taken to address the comments.

<sup>6</sup> BLM also tiered the EA to a September 2008 EA that had been prepared to generally assess the environmental ramifications of lifting STLs on drilling and other activities in designated wildlife areas. See EA at 3-4.

had been prepared, under contract to BLM, by the New Mexico Institute of Mining and Technology.<sup>7</sup> The RFDS would involve the drilling and development of a total of 9,942 new oil and gas wells and associated infrastructure over a 20-year period beginning January 1, 2002, on approximately 2.6 million acres of leased or open for leasing Federal lands in the San Juan Basin, New Mexico (hereinafter, Planning Area).

No drilling and development would occur, under the POD, until after the submission and approval, following site-specific environmental review, of applications for permits to drill (APD) and related sundry notices. See DR at 1, 5; EA at 10, 50, 51. Further, BLM provided that WPX would “comply with all applicable [F]ederal, [S]tate, and local laws and regulations,” and “obtain the necessary permits for drilling, construction, and operation[.]” EA at 9; see DR at 7.

In his December 2011 DR, the District Manager approved the proposed POD, authorizing the drilling and development of 53 natural gas wells, subject to Project Design Features (PDF), because it promotes the development of the natural resources of the public lands, while avoiding or minimizing any adverse impacts on the human environment.<sup>8</sup> See DR at 1, 8-14.

The District Manager also determined that the proposed POD conformed, as required by section 302(a) of the Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. § 1732(a) (2006), to the applicable land-use plan

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<sup>7</sup> The full RFDS can be found at AR 4277-4401.

<sup>8</sup> WildEarth originally filed an appeal, docketed as IBLA 2012-76, from the District Manager’s December 2011 DR and FONSI. By Order dated Oct. 10, 2012, we dismissed the appeal, since WildEarth was first required to seek SDR of the DR and FONSI, whereupon it could appeal to the Board from an adverse decision.

WPX now argues that, since WildEarth finally sought SDR of the DR and FONSI on Oct. 26, 2012, more than 20 business days after it received or is deemed to have received the DR and FONSI, thus exceeding the mandatory time period established by 43 C.F.R. § 3165.3(b), that “failure to first request the SDR . . . within the regulatory time frame is *fatal to their current request for appeal.*” Answer at 11 (emphasis added). It moves the Board to dismiss the present appeal as untimely. We deny the motion. The question of the timeliness of the SDR request was properly subject to adjudication by the State Director and, in turn, by the Board, in the event of an appeal from an adverse decision by the State Director, but may not be raised initially before the Board on appeal from the State Director’s decision on the merits.

(December 2003 Farmington RMP). *See* DR at 1, 6; EA at 3-4. He further concluded, in his FONSI, that the proposed POD was not likely to significantly impact the human environment, and thus BLM was not required, by section 102(2)(C) of NEPA, to prepare an EIS, before approving the action.

WildEarth sought SDR of the District Manager's December 2011 DR and FONSI, pursuant to 43 C.F.R. § 3165.3(b).

In his November 2012 decision, the Associate Deputy State Director upheld the DR and FONSI, approving the POD, concluding that WildEarth's arguments were "unfounded[.]" Decision at 5.

WildEarth appealed timely from the Associate Deputy State Director's November 2012 decision, contending that, although it was generally authorized to approve PODs, BLM's decision to approve the POD at issue violated the environmental review requirements of section 102(2)(C) of NEPA and the compliance obligation of section 202(c) of FLPMA, 43 U.S.C. § 1712(c) (2006). It asks the Board to reverse BLM's decision to uphold approval of the POD, set aside approval of the POD, and remand the case to BLM for compliance with FLPMA and NEPA, before deciding, once again, whether to approve the POD.<sup>9</sup>

*Whether BLM's Decision to Approve the POD Violated Section 102(2)(C) of NEPA*

WildEarth argues that BLM's decision to approve the POD violates section 102(2)(C) of NEPA because BLM failed to (1) adequately consider the likely air quality impacts of the proposed POD, (2) consider a reasonable range of alternatives to the proposed POD, and (3) prepare an EIS, addressing the likely significant impacts of the proposed POD. It especially asserts that BLM was required to supplement the FEIS, in order to address the "unique" significant environmental impacts of drilling and producing the 53 natural gas wells in the Mancos Shale formation: "[The] FEIS, including the RMP Reasonably Foreseeable Development Scenario ('RFDS'), did not contemplate commercially viable development of the Mancos shale, did not consider the utilization of horizontal drilling techniques, and did not specifically consider the impacts of hydraulic fracturing." NA/SOR at 3.

At the outset, we note that section 102(2)(C) of NEPA generally requires BLM to consider the potential environmental impacts of a proposed action in an EIS if that

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<sup>9</sup> By order dated Sept. 17, 2014, we granted BLM's unopposed request for a protective order under the same terms as the protective order issued with respect to the administrative record in *WildEarth Guardians*, IBLA 2012-76.

action is a “major Federal action[] significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C) (2006). A BLM decision to proceed with a proposed action, based on an EA tiered to a programmatic EIS, will be upheld, as being in accord with section 102(2)(C) of NEPA, where the record demonstrates that BLM has, considering all relevant matters of environmental concern, taken a “hard look” at potential environmental impacts, and made a convincing case that no significant impact will result that was not already addressed in the EIS or that any such impact will be reduced to insignificance by the adoption of appropriate mitigation measures. *Center for Native Ecosystems*, 182 IBLA 37, 50 (2012); *Wyoming Outdoor Council*, 173 IBLA 226, 235 (2007).

Importantly, in assessing the adequacy of an EA, we will generally be guided by the “rule of reason,” such that the EA need only briefly discuss the likely impacts of a proposed action: “By nature, it is intended to be an overview of environmental concerns, *not* an exhaustive study of all environmental issues which the project raises.” *Bales Ranch, Inc.*, 151 IBLA 353, 358 (2000) (quoting *Don’t Ruin Our Park v. Stone*, 802 F. Supp. 1239, 1247 (M.D. Pa. 1992)).

An appellant seeking to overcome such a decision carries the ultimate burden to demonstrate, with objective proof, that BLM failed to consider a substantial environmental question of material significance to the proposed action, or otherwise failed to abide by section 102(2)(C) of NEPA. *Bales Ranch, Inc.*, 151 IBLA at 357. The appellant must make an “*affirmative showing* that BLM failed to consider a substantial environmental question of material significance,” and cannot simply “pick apart a record with alleged errors and disagreements[.]” *Arizona Zoological Society*, 167 IBLA 347, 357-58 (2006) (quoting *In re Stratton Hog Timber Sale*, 160 IBLA 329, 332 (2004)) (emphasis added).

Further, BLM’s decision, after environmental review, to issue a FONSI, and not prepare an EIS, “implicates agency expertise.” *Greater Yellowstone Coalition v. Flowers*, 359 F.3d 1257, 1274 (10th Cir. 2004). Thus, where, in assessing environmental impacts, BLM properly relies on the professional opinion of its technical experts, concerning matters within the realm of their expertise and which is reasonable and supported by record evidence, an appellant challenging such reliance must demonstrate, by a preponderance of the evidence, error in the data, methodology, analysis, or conclusion of the expert. *See Wyoming Outdoor Council*, 173 IBLA at 235 (citing *Fred E. Payne*, 159 IBLA 69, 77-78 (2003)). A mere difference of opinion, even of expert opinion, will not suffice to show that BLM failed to fully comprehend the true nature, magnitude, or scope of the likely impacts. *See id.*

WildEarth argues first that BLM violated section 102(2)(C) of NEPA because it failed to adequately consider the likely air quality impacts of the proposed POD, particularly the impacts associated with emissions of volatile organic compounds (VOC), nitrogen dioxide (NO<sub>2</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>).<sup>10,11</sup> See NA/SOR at 5-14. It asserts that BLM improperly concluded that it did not need to fully address these impacts in the EA, since it had already done so in the FEIS and, in any event, would consider them further during the course of implementing the POD. WildEarth states that new information demonstrates that the emissions reported in the FEIS are “no longer valid.” *Id.* at 10. It also argues that BLM cannot defer its analysis of reasonably foreseeable impacts of the POD, when the nature and scope of the proposed activity is not uncertain:

WPX has disclosed to BLM exactly where it intends to locate its drilling pads[,] . . . exactly where it intends to drill its wells[,] . . . exactly how the well pads will likely be laid out, including the equipment utilized[,] . . . exactly where it intends to locate its stimulation pads[,] . . . the timing for drilling activities[,] . . . the type of construction activities expected[,] . . . the type of drilling system, including the drilling rigs[] expected to be used[,] . . . how stimulation activities are expected to take place[,] . . . the fact that the wells are expected to produce and be connected to existing gathering pipelines[,] . . . and the locations of

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<sup>10</sup> VOCs chemically react with nitrogen oxides (NO<sub>x</sub>), in the presence of sunlight, to form ozone (O<sub>3</sub>). See EA at 25. “While ozone and nitrogen dioxide are criteria air pollutants [subject to Federal and State ambient air quality standards], VOCs and the other various oxides of nitrogen are not.” *Id.* at 26.

<sup>11</sup> WildEarth notes that the New Mexico Environment Department (NMED) faulted BLM for not quantifying the likely emissions from the drilling and production of 53 wells, thus allowing BLM to accurately assess air quality impacts. See NA/SOR at 6-7 (citing Letter to BLM from Julie Roybal, Environmental Impact Review Coordinator, NMED, dated Sept. 29, 2011 (NMED Letter) (AR 845), at unpaginated (unp.) 1). BLM noted, however, that, while not quantified, likely emissions would be less than analyzed under the RFDS in the FEIS, and, in any event, could not be quantified in considering the overall proposal to drill and develop the POD, but instead would be quantified when considering whether to approve actual APDs. See EA at 51; DR at 8. NMED did not identify how quantifying emissions was necessary to BLM’s analysis of the likely cumulative air quality impacts of the POD, given the FEIS, and thus could not be deferred to the Application for Permit to Drill (APD) stage.

likely gathering pipelines that will be needed to facilitate ongoing production[.]

DR at 6. WildEarth concludes that, given the level of specificity, “BLM cannot claim that it lacks sufficient site-specific information with which to take a hard look at air quality impacts.” *Id.* at 12. It also argues that BLM entirely failed to address the likely cumulative impacts of the POD and past, present, and reasonably foreseeable future actions on air quality. *See* NA/SOR at 14.

[1] BLM is generally permitted to defer site-specific environmental analysis regarding likely air quality impacts until after it issues the leases generally authorizing exploration and production of the oil and gas resources underlying the leased land, until it defines the activity proposed to be undertaken to explore for and recover such resources. *Amigos Bravos v. BLM*, 2011 WL 7701433 (D. N.M. Aug. 3, 2011); *see id.* at \*12-\*14, \*15 (“[W]here specific environmental threats have not yet solidified, a detailed, site-specific inquiry is not required” (citing *Park County Resource Council, Inc. v. U.S. Department of Agriculture*, 817 F.2d 609, 623 (10th Cir. 1987))), \*24. Such a definition of the proposed activity generally occurs upon the submission of an APD, in which the lessee proposes the drilling and development of a single specific well, but may also occur upon submission of a POD, in which the lessee proposes the drilling and development of several specific wells.

While the precise nature of the drilling and development to be undertaken under a POD may not be fully known, the timing, location, manner, and other features of the drilling and development are well defined. Further, having already leased the affected lands, not subject to a no surface occupancy stipulation, BLM has already irreversibly and irretrievably committed to allowing drilling and development, somewhere, at some time, and in some manner, on the leased lands. *See* EA at 3 (“The existing lease is a binding legal contract that allows development of the mineral estate by [WPX]”), 6 (“In compliance with the Mineral Leasing Act, the decision to be made is in what manner resource extraction should occur, not whether it can occur”); DR at 5, 8; *Center for Native Ecosystems*, 170 IBLA 331, 345 (2006); *Southern Utah Wilderness Alliance*, 166 IBLA 270, 276-77 (2005), and cases cited. The POD stage of oil and gas drilling and development clearly represents the appropriate time for consideration of the cumulative air quality impacts likely to result from the drilling and development of *all of the 53 wells*. *See* DR at 1 (“The intent of using a Plan of Development (POD) was to consider the broader impacts and to disclose to the public and analyze the impacts from a broader perspective; recognizing that future actual impacts associated with the proposed development will be analyzed in site-specific NEPA analyses; this approach was taken to assess *the cumulative impacts of all the proposed development*” (emphasis added)); *Park County Resource Council, Inc. v. U.S. Department of Agriculture*, 817 F.2d at 623 (“As an

overall regional pattern or plan evolves, the region-wide ramifications of development will need to be considered at some point.”); e.g., *Wyoming Outdoor Council*, 176 IBLA 15, 26-27 (2008); *Biodiversity Conservation Alliance*, 174 IBLA 1, 15-17 (2008).

In the present case, BLM considered the likely impacts of emissions generated by POD activities generally on air quality in the EA, tiered to the FEIS. See EA at 18, 23-30, 50-51, 77-80, 80-81; DR at 8; Proposed RMP and FEIS, Volume I, at 3-48 to 3-54, 4-58 to 4-70 (Alternative B), 4-108 (“Annual emissions and resulting ambient air quality impacts from gas production under Alternative D therefore would be about 70 percent of those estimated for Alternative B.”), 4-124, 4-131 to 4-132; Proposed RMP and FEIS, Volume II, Appendix J, at J-2, J-10, J-11; ROD at 12-15.<sup>12</sup> BLM expected the air quality impacts of the POD to be similar to the no action alternative, under which drilling and development would continue as forecast in the RFDS, which was analyzed in the FEIS: “Because the level of activity and oil and gas development for the alternatives [considered in the EA] are consistent with those levels predicted in the RFDS, the potential air quality impacts of the alternatives are included in the FEIS[.]” EA at 51; see EA, Appendix C, at unpag. 3 (“[T]he [proposed] action is consistent with the scale of development analyzed in the RMP FEIS.”). It stated that it had concluded, in the case of the RFDS, that “BLM expects that significant impacts to air quality will be avoided and that oil and gas operations will meet all applicable air quality standards.” EA at 51 (quoting ROD at 13). BLM fully expected that to be the case with the POD, especially since the POD was likely to result in less emissions than the RFDS, since it provided for using natural gas to power drilling rigs and adopting other PDFs. See EA at 51; DR at 8.

We conclude from our review that the likely air quality impacts of the POD were adequately addressed in the EA, tiered to the FEIS. We recognize that BLM also stated “further NEPA analysis” would be conducted in connection with consideration of APDs, when “detailed data” regarding drilling operations, equipment, facilities, and likely emissions was available. EA at 51; see EA, Appendix C, at unpag. 3 (“Air quality emissions will be addressed at the APD level when the site-specific facts of the proposed drilling are better known.”). Therefore, once APDs are submitted, specifically locating the 53 wells and further defining the related equipment and

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<sup>12</sup> See also Air Quality Modeling Study for the Four Corners Region, ENVIRON International Corp., dated June 30, 2009 (AR 2033-2279); Addendum to Air Quality Modeling Study for the Four Corners Region, Additional Ozone Source Apportionment and Ozone Sensitivity Modeling Analyses, ENVIRON International Corp., dated Jan. 22, 2010.

facilities, BLM indicates it will undertake additional site-specific review of the air quality and other impacts of the wells.<sup>13</sup>

To the extent that the “specific features and engineering particulars” of the custom-built drilling rig alter emissions from what was envisaged at the time of preparation of the FEIS, any changes in the expected air quality impacts will be captured by the site-specific environmental analysis undertaken following submission of the APDs. Decision at 2. BLM is not required to speculate regarding any changes in air quality impacts attributable to the new rig. Rather, its analysis properly focused on the emissions likely to occur in the case of the use of an existing rig, and the resulting air quality impacts. WildEarth may, of course, challenge a BLM decision to approve any or all of the APDs. See, e.g., *Montana Trout Unlimited*, 178 IBLA 159, 166-67 (2009).

WildEarth also argues that the EA, tiered to the FEIS, failed to satisfy the hard look requirement of NEPA because BLM did not consider the emissions data and analysis associated with oil and gas operations contained in a November 25, 2009, Final Report prepared by the ENVIRON International Corporation and others, entitled “Development of Baseline 2006 Emissions from Oil and Gas Activity in the South San Juan Basin” (2009 Report). It states that the 2009 Report, which was provided to BLM along with WildEarth’s September 28, 2011, comments, “undercuts BLM’s reliance on the emissions projections made in the 2003 Farmington RMP and associated FEIS[.]” NA/SOR at 7. It asserts that the Report demonstrates that BLM “underestimated” VOC emissions from oil and gas operations “by nearly 30-fold,”

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<sup>13</sup> WildEarth expects that, rather than undertake further site-specific NEPA analysis of APDs or other specific activity under the POD, BLM will prepare Documentations of NEPA Adequacy (DNAs) which only assess the adequacy of existing NEPA review. See NA/SOR at 12 (citing E-mail to Maureen Joe, Project Manager, Farmington Field Office, BLM, from Megan A. Stouffer, State Planning and Environmental Coordinator, New Mexico State Office, BLM, dated Aug. 10, 2011 (AR 463) (“I thought that we were hoping to do DNAs off of this POD for each APD.”)). We agree that DNAs only serve to demonstrate whether BLM already has satisfied NEPA in existing EAs and/or EISs, and do not themselves constitute NEPA review. See *Colorado Environmental Coalition*, 173 IBLA 362, 372 (2008), and cases cited. WildEarth’s concern is not an issue ripe for review. We note that, were BLM to rely on DNA’s in assessing environmental impacts under NEPA, an appellant may raise before the Board the issue of the adequacy of the existing EA and FEIS to address site-specific impacts. See *id.* We will not prejudge that question at this time. See *Biodiversity Conservation Alliance*, 174 IBLA at 17-18.

since the FEIS had estimated in 2003 that, in 20 years, VOC emissions from operations in the Planning Area would total 2,008.5 tons per year, whereas the Report stated in 2009 that, in 2006, they actually totaled 59,933 tons per year. *Id.* at 8 (citing Proposed RMP and FEIS, Volume II, Appendix J, at J-11 (Table J-21 (Year 20 Annual Emissions Associated with the BLM Farmington/Rio Puerco RMPs–Alternative D))).<sup>14</sup>

WildEarth concludes that, in light of the significant new information regarding VOC emissions, BLM should be required to supplement the FEIS, pursuant to 40 C.F.R. § 1502.9(c), before deciding whether to approve the POD, and that, in any event, BLM cannot rely on the “outdated” FEIS. NA/SOR at 10.

BLM found no discrepancy, since the FEIS’ estimate had only reflected VOC emissions from compressors and separators, which compared favorably to the 2009 Report’s report of VOC emissions for compressors and separators from the total number of wells predicted in the FEIS. *See* EA, Appendix C, at unp. 2; Proposed RMP and FEIS, Volume I, at 4-59 (“[T]he overwhelming majority of emissions from . . . [oil and gas production] activity would occur from wellhead [and central] compression demands” (citing Table 4-16 (Project Year 1 and Year 20 Annual Air Emissions Associated with Gas Production–Alternative B (Tons per Year))). It explained that the Report identified emissions totaling 4,180 tons per year from compressors and separators associated with the 20,649 wells operating in 2006, which properly translated to 2,012 tons per year associated with the 9,942 wells that had been expected at the time of preparation of the FEIS. The 2009 Report’s figure of 2,012 compared favorably to the FEIS’ figure of 2,008.5 tons per year.

WildEarth states that BLM’s recalculation of the estimated VOC emissions “makes no sense,” since it obscured the fact that more wells were operating in 2006 than had been anticipated in 2003, which emissions must be taken into account, for environmental review purposes. NA/SOR at 9. It also states that BLM’s estimate of VOC emissions in the FEIS does not take into account emissions associated with venting, dehydration, and other oil and gas operations, other than compression and

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<sup>14</sup> WildEarth gives no citation to the 2009 Report for its stated 59,933 tons per year of VOC emissions. We note that the document reports a total of 60,697 tons per year for the South San Juan Basin. *See* 2009 Report at 44 (Table 3 (2006 emissions of all criteria pollutants by county for the South San Juan Basin)). WildEarth appears to have paired this figure down to reflect the emissions “for San Juan/Rio Arriba Counties[.]” NA/SOR at 8. We have determined that the emissions for the two counties amount to 55,848 tons per year. *See* 2009 Report at 44 (Table 3).

separation, which are reflected in the 2009 Report. *See id.* at 9-10. It further notes that, in 2006, a total of 55,758 tons per year were associated with such operations, “just in San Juan and Rio Arriba Counties,” according to the Report. *Id.* at 9.<sup>15</sup>

We think that the 2009 Report has little if any demonstrated bearing on the likely VOC emissions from the drilling and development of 9,942 wells under the RFDS in the Planning Area, which is what was analyzed in the FEIS. The Report concerns the drilling and development of considerably more wells (20,649), because it covers a larger area than the Planning Area, which was covered by the FEIS. *See* 2009 Report at ES-2 (Table ES-3 (Comparison of production characteristics of all basins inventoried in this study to date)). The Report covers the “South San Juan Basin,” which “wholly include[s] the counties of McKinley, Sandoval, San Juan, and Rio Arriba.” *Id.* at 1. Most of the 60,697 tons per year of VOC emissions emanated in 2006 from Rio Arriba (27,248) and Sandoval (32,685) counties. *See id.* at ES-2 (Table ES-1 (Summary of emissions from oil and gas operations in the South San Juan Basin)). The Planning Area, however, encompasses “all of San Juan County, most of McKinley County, western Rio Arriba County and northwestern Sandoval County[.]” ROD at 1. It thus encompasses only portions of the two counties (Rio Arriba and Sandoval) where the majority of VOC emissions were found to emanate in 2006. WildEarth presents no evidence, based on the VOC emissions reported in the 2009 Report for the South San Juan Basin, showing what the level of VOC emissions was in 2006 just for the Planning Area, in order that the level in the FEIS could be compared to the level in the 2009 Report.

BLM attempted to engage in a useful comparison by calculating a per well VOC emission level, taking the total of VOC emissions from compressors and separators in the 2009 Report (4,180 tons per year), and determining that, given 20,649 wells in the entire South San Juan Basin, this translated to 0.202 tons per year per well. Given the expected 9,942 wells in the RFDS, this translated to a total of 2,012 tons per year for all 9,942 wells, which compared favorably to the estimate of 2,008.5 tons per year in the FEIS. This calculation was limited to compressors and separators, because the level in the FEIS had been so limited, since they were expected to generate the “overwhelming majority” of VOC emissions, in the case of oil and gas production. Proposed RMP and FEIS, Volume I, at 4-59. In any event, the comparison revealed no serious discrepancy.

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<sup>15</sup> The 55,758 figure is taken from Table 5 (2006 VOC emissions by county and by source category for the South San Juan Basin) at page 46 of the 2009 Report. We calculate that, for San Juan and Rio Arriba counties, the total is 52,745 tons per year.

Most importantly, BLM is far from exceeding the anticipated number of 9,942 wells in the Planning Area at the present time. Since the drilling and development of 53 wells under the current POD is what is now at issue and since current drilling and development is well within the level of activity envisioned in the RFDS and analyzed in the FEIS, we find no reason to discount the relevance of the air quality impact analysis in the FEIS to the present proposal. We are unconvinced that any discrepancy in expected VOC emissions between the FEIS, which assumed 9,942 wells, and the 2009 Report, which assumed 20,649 wells, including all of the activities likely to generate emissions, establishes any error or omission in BLM's assessment of the likely air quality impacts of the drilling and development of 53 wells, under the current POD.<sup>16</sup> See Decision at 4 (“The 2003 [Farmington] RMP has not been invalidated by recent air quality data”).

[2] WildEarth also argues that the EA, tiered to the FEIS, failed to satisfy the hard look requirement of NEPA because BLM failed to consider whether the proposed drilling and development of 53 wells is likely to comply with “new and stronger” National Ambient Air Quality Standards (NAAQS) adopted by the U.S. Environmental Protection Agency (EPA), under the Clean Air Act (CAA), 42 U.S.C. §§ 7401-7671q (2006), since promulgation of the FEIS in 2003. NA/SOR at 10. It refers to the new 8-hour NAAQS for O<sub>3</sub> (2008), the new 24-hour NAAQS for PM<sub>2.5</sub> (2006), the new Prevention of Significant Deterioration (PSD) (or maximum allowable increase in ambient concentration (or increment)) NAAQS for PM<sub>2.5</sub> (2010), and the new 1-hour NAAQS for NO<sub>2</sub> (2010).<sup>17</sup> See *id.* at 11.

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<sup>16</sup> BLM stated that, in the case of the POD, “[n]o well head compression is expected for the Basin Mancos wells” now at issue. See EA at 14. It would anticipate no contribution of VOCs attributable to wellhead compression. See Proposed RMP and FEIS, Volume II, Appendix J, at J-11 (Table J-21).

<sup>17</sup> WildEarth does not report the new NAAQSs, nor seek to demonstrate that the drilling and development of the 53 wells is likely to cause air quality in the immediate vicinity of the wells or generally in the Planning Area to fall below these standards. We note that the new NAAQSs are 0.075 parts per million (ppm) (8-hour O<sub>3</sub>) (73 Fed. Reg. 16436 (Mar. 27, 2008)); 35 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) (24-hour PM<sub>2.5</sub>) (71 Fed. Reg. 61144 (Oct. 17, 2006)); 4  $\mu\text{g}/\text{m}^3$  (annual) and 9  $\mu\text{g}/\text{m}^3$  (24-hour) (PSD for PM<sub>2.5</sub> in Class II areas) (75 Fed. Reg. 64864 (Oct. 10, 2010)); and 100 parts per billion (ppb) (1-hour NO<sub>2</sub>) (75 Fed. Reg. 6474 (Feb. 9, 2010)). See EA at 25 (“The area of the proposed action is considered Class II for air quality”).

The November 2011 EA, states that the Planning Area is “currently in attainment with all National and State Ambient Air Quality Standards.” EA, Appendix C, at unpag. 3; see EA at 26 (O<sub>3</sub> in San Juan County), 27 (PM<sub>2.5</sub> in San Juan County), 81 (“The San Juan Basin airshed is currently in attainment of all NAAQS and NMAAQs”).<sup>18</sup> It also reports that, in 2010, EPA “confirm[ed] that the San Juan Basin is in attainment for all air pollutants regulated under the NAAQS.” Answer at 11 (citing EA at 25). In addition, NMED reported, in its September 29, 2011, letter to BLM, that “San Juan and Rio Arriba Counties, NM are both currently considered to be in attainment with all New Mexico and National Ambient Air Quality Standards.” NMED Letter at unpag. 1. It further noted that the New Mexico Air Quality Bureau (NMAQB), NMED, had evaluated the POD, concluding that, while the “[p]otential exists for temporary increases in dust and emissions from earthmoving, construction equipment and other vehicles,” “the increases *should not result in non-attainment of air quality standards.*” *Id.* (emphasis added).

We agree that BLM is still required to determine the likely impacts of the POD “on future air quality,” and thus whether the proposed drilling and development of 53 wells is likely to continue to comply with the NAAQSs. NA/SOR at 13. BLM addressed the likely impacts of the POD on the NAAQSs in the EA, tiered to the FEIS, concluding that the impacts would be similar to no action, and even less than no action, given implementation of PDFs intended to minimize emissions, thus complying with all NAAQSs. See EA at 51, 81.

WildEarth, however, asserts that BLM concluded that the impacts of the POD would be similar to what was forecast in the FEIS, but further states that the FEIS does not satisfy NEPA since it did not address at all whether drilling and development was likely to satisfy the NAAQSs *adopted since promulgation of the FEIS in 2003*. The new NAAQSs alone do not constitute significant new information or circumstances demonstrating that the POD is likely to impact the environment in a significant manner or to a significant extent not envisioned in the FEIS, requiring supplementation of the FEIS. This is specially true since BLM has provided for ensuring compliance with any new NAAQSs, through monitoring and adoption of appropriate measures during the APD approval process, and in light of NMED permitting and enforcement, subject to EPA oversight. See 40 C.F.R. § 1502.9(c); *Wyoming Outdoor Council*, 176 IBLA at 41-42 (citing *Marsh v. Oregon Natural*

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<sup>18</sup> In stating that the Planning Area and San Juan County, where the POD will take place, were currently in attainment, BLM used the 8-hour and 24-hour NAAQSs, respectively, for O<sub>3</sub> and PM<sub>2.5</sub>, adopted in 2008 and 2006. See EA at 24-25 (Table 3-2 (Summary of National Ambient Air Quality Standards (NAAQS))).

*Resources Council*, 490 U.S. 360, 373-74 (1989)). Moreover, WildEarth presents no evidence demonstrating that the drilling and development of the 53 wells is likely to cause the new NAAQSs to be exceeded or violated.

WildEarth offers no expert opinion or other supporting evidence establishing the likely air quality impacts of the POD, or demonstrating that they are likely to exceed or violate any NAAQS or otherwise constitute a significant impact, thereby showing error in BLM's environmental analysis. Its appeal rests on its critique of BLM's efforts to establish the likely air quality impacts of the POD, amounting to an effort to "pick apart a record with alleged errors and disagreements," rather than an effort to make an "affirmative showing that BLM failed to consider a substantial environmental question of material significance[.]" *Arizona Zoological Society*, 167 IBLA at 357-58 (quoting *In re Stratton Hog Timber Sale*, 160 IBLA at 332) (emphasis added).

Next, WildEarth argues that BLM violated section 102(2)(C) of NEPA by failing to consider a reasonable range of alternatives to the proposed POD. See NA/SOR at 14-17. It specifically asserts that, although the EA ostensibly included a no action alternative, BLM did not consider such an alternative, since the alternative "was not actually an alternative that prescribed no action," and the EA did not "otherwise include[] documentation of the current and future state of the environment in the absence of the proposed action." *Id.* at 15.

It is true, as WildEarth notes, that the no action alternative did not entirely preclude the drilling and development of any natural gas wells, but rather only precluded any drilling and development proposed under the POD: "[T]aking 'no action' (that is, not undertaking to consider development of the POD as proposed) would reject the applicant's proposal but would nonetheless result in consideration of individual APDs submitted by [WPX] on a case-by-case basis." NA/SOR at 15 (quoting EA at 10) (emphasis added). Under the no action alternative, WPX would continue to exercise its lease rights to drill and develop oil and gas resources, consistent with the RFDS analyzed in the FEIS. See EA at 63. WildEarth concludes that, since, under the no action alternative, BLM would "still approve drilling activities to access the Mancos shale in the Middle Mesa project area" on a case-by-case basis, the no action alternative is, in fact, a "de facto action alternative."<sup>19+</sup> NA/SOR at 15.

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<sup>19</sup> WildEarth states that, since BLM views the case-by-case approval of the APDs as a "foregone conclusion," BLM has already forecast that a total of "45 new wells will be drilled" over the course of 5 years, under the no action alternative. NA/SOR at 15 (citing EA at 50 (Table 4-2 (Summary Comparison of Alternatives))) (emphasis added). We find no such expectation by BLM. BLM is well aware that the APDs will

(continued...)

BLM is generally required by section 102(2)(E) of NEPA, 42 U.S.C. § 4332(2)(E) (2006), in the case of an EA, to consider “appropriate alternatives” to the proposed action, which will accomplish its intended purpose, are technically and economically feasible, and have a lesser impact. *See Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1180-81 (9th Cir. 1990); *Bales Ranch, Inc.*, 151 IBLA at 363. Such alternatives must include the no action alternative. *See Southern Utah Wilderness Alliance*, 159 IBLA 220, 240-41 (2003) (citing *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228 (9th Cir. 1988), *cert. denied*, 489 U.S. 1066 (1989)); 43 C.F.R. § 46.310(b); BLM’s NEPA Handbook, H-1790-1 (Rel. 1-1710 (01/30/2008)), § 8.3.4.2, at 79 (“Although the regulation at 40 CFR 1508.9(b) makes no specific mention of the No Action alternative with respect to EAs, the CEQ [Council on Environmental Quality] has interpreted the regulations generally to require some consideration of a No Action alternative in an EA. . . . Therefore, at a minimum, your EA must include documentation of the current and future state of the environment in the absence of the proposed action.”). Further, an EA must generally include a “brief discussion[] . . . of alternatives[.]” 40 C.F.R. § 1508.9(b).

[3] It is true that, for the purposes of the EA, BLM assumed that, although no drilling and development would occur under the proposed POD in the case of the no action alternative, drilling and development might still occur in the Planning Area, as forecast in the RFDS and considered in the FEIS. *See* EA at 10 (“[B]ecause the lands are subject to existing fluid minerals leases, the no action alternative is not a ‘no development’ alternative.”); EA, Appendix C, at unp. 10. We find no violation of NEPA, since it is well established that, in connection with the no action alternative, BLM is required to consider the activities likely to occur as a consequence of not approving the proposed action. *See Young v. General Services Administration*, 99 F. Supp. 2d 59, 74-75 (D.D.C. 2000), *aff’d*, 11 Fed.Appx. 3 (D.C. Cir. 2000); *Biodiversity Conservation Alliance*, 174 IBLA at 3 (“[T]aking ‘no action’ . . . would reject the operators’ proposal but would nonetheless result in consideration of individual [APDs] . . . submitted by lessees or operators on a case-by-case basis.”); 46 Fed. Reg. 18026, 18027 (Mar. 23, 1981) (“‘No action’ [in the case of proposed projects] . . . mean[s] the proposed activity would not take place[.] . . . Where a choice of ‘no action’ by the agency would result in predictable actions by others, this consequence of the ‘no action’ alternative should be included in the analysis.”); BLM’s NEPA Handbook, § 6.6.2, at 52 (“The analysis of the No Action alternative must only

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(...continued)

be subjected to site-specific environmental review, as part of the process of deciding whether to approve the APDs. *See* EA at 50. It thus only “estimated” the number of wells that *might be drilled*. *Id.*

analyze what is reasonably foreseeable if the application [or proposal] is denied.”). Thus, in addressing the no action alternative in the EA, BLM was permitted to consider the likely impacts of undertaking drilling and development under the RFDS, apart from the POD.<sup>20</sup>

Finally, WildEarth argues that BLM violated section 102(2)(C) of NEPA because it failed to prepare an EIS, addressing the likely significant impacts of the proposed POD. *See* NA/SOR at 17-21. It asserts that, since neither the EA nor the FEIS considered the likely significant environmental impacts of authorizing horizontal drilling and hydraulic fracturing of the Mancos Shale formation, BLM must be required to supplement the FEIS, before deciding again whether to approve the POD.

WildEarth states that, when it prepared the FEIS, BLM did not consider horizontal drilling and hydraulic fracturing as a viable drilling and development method, from the technical or the economic standpoint. It quotes from the description of the RFDS that was used as a basis for assessing the likely environmental impacts of oil and gas drilling and development in the FEIS:

Horizontal drilling is possible but not currently applied in the San Juan Basin due to poor cost to benefit ratio. If horizontal drilling should prove economically and technically feasible in the future, the next advancement in horizontal well technology could be drilling multi-laterals or hydraulic fracturing horizontal wells. Multi[-]laterals could be one, two or branched laterals in a single formation or single laterals in different formations. Hydraulic fracturing could be a single fracture axial with the horizontal well or multiple fractures perpendicular to the horizontal well. These techniques are currently complex and costly,

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<sup>20</sup> We also note that BLM considered a no action alternative in the FEIS. *See* Proposed RMP and FEIS, Volume I, at 2-29, 2-31, 2-33 to 2-34. Normally, BLM would have thus already addressed the likely impacts of not allowing any drilling and development to occur, in the course of deciding whether any of the public lands in the Planning Area should be leased for oil and gas purposes. It would not, therefore, be required to again address that alternative in connection with its consideration of the proposed POD. *See Southern Utah Wilderness Alliance*, 159 IBLA at 242 (“[A]n EA which is tiered to a final EIS need not restate . . . a no action alternative that was already considered in the document to which the EA is tiered”). However, the public lands at issue were already leased at the time of preparation of the FEIS. Thus, BLM could not consider entirely precluding leasing, and the drilling and development, of these lands in the FEIS.

and therefore typically inappropriate for most onshore U.S. reservoirs. *Comprehensive engineering and geologic research will be required in the near future in order for these techniques to **become viable** within the 20 year time frame anticipated by this RFD[S].*<sup>21</sup>

NMIMT Report at 8.3; *see* Report, Unconventional gas reservoirs, hydraulic fracturing and the Mancos Shale, David J. Mankiewicz, Assistant Field Manager, Minerals, Farmington Field Office, BLM, dated Nov. 30, 2011 (AR 195-98), at unpaginated 6 (“[A]t the time of the RFD[S] report horizontal drilling and multi-stage hydraulic fracturing was in its infancy, since then the technology has evolved to be more efficient and less costly [than] in the past. Horizontal drilling and multi-stage fracturing is a common practice throughout the U.S. even though the RFD[S] only hinted at its future success and usage.”); Proposal for Rosa Middle Mesa Development, WPX, dated Apr. 14, 2011, at 3 (“When the FEIS was prepared, horizontal drilling had been attempted as an experimental technique in the San Juan Basin, but faced technical problems and had not yet been proven economically viable.”). WildEarth concludes that, since it did not regard horizontal drilling and hydraulic fracturing as a viable drilling and development method, “BLM did not analyze the environmental impacts of this technology” in the FEIS. NA/SOR at 17.

[4] Where the activities currently proposed were not contemplated at the time of preparation of an EIS based on an RFDS, either because they now exceed what was originally contemplated or simply were never contemplated as part of the RFDS, BLM is required to supplement the EIS, when the additional or new activities are likely to significantly impact the human environment. *See Biodiversity Conservation Alliance*, 174 IBLA at 13, 19 (“[I]f an agency exceeds the RFD scenario, a NEPA issue is presented and the question is whether the agency has authorized a Proposed Action

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<sup>21</sup> Drilling and development of the Mancos Shale formation was envisioned at the time of preparation of the FEIS. *See* BLM Answer at 5 (citing NMIMT Report at 5.23, 5.27); WPX Answer at 24 (“The Mancos Shale gas development was . . . noted by operators in the RFDS as a future shale gas target.” (citing NMIMT Report at 7.4)); EA at 4, 5 (“The Mancos Shale reservoir was analyzed in the RFDS . . . as an emerging gas play similar to the existing shale gas plays being developed at the time of the [RFDS] report.”); EA, Appendix C, at unpaginated 9 (“Drilling to the Mancos Shale formation has been ongoing in the planning area for decades”); Proposed RMP and FEIS, Volume I, at 2-31 (“There are five primary subsurface hydrocarbon formations in the planning area: the Fruitland Formation (natural gas, coalbed methane [CBM], and coal), Pictured Cliffs (gas), Mesaverde (gas and oil), Mancos (oil and gas), and . . . Dakota Formation (gas, oil, and coal).”).

without fully considering its effects in violation of NEPA section 102(2)(C). The remedy for that violation is to direct the agency to prepare or supplement an EIS considering those impacts.”); *Deborah Reichman*, 173 IBLA 149, 158 (2007) (“The critical question when an RFD scenario has been exceeded is whether the case-specific facts demonstrate that further environmental analysis is warranted.”).

In the RFDS, BLM provided the “analytical baseline for identifying and quantifying direct, indirect, and cumulative impacts of oil and gas activity . . . on all potentially productive areas [of the Planning Area] open to oil and gas leasing[.]” *Deborah Reichman*, 173 IBLA at 157-58. The RFDS recognized that oil and gas wells might be drilled horizontally and produced using stimulation techniques akin to hydraulic fracturing, since such methods had been used elsewhere in the San Juan Basin. See NMIMT Report at vii (“The potential role of evolving technology [in terms of horizontal drilling and new stimulation techniques] cannot be over-emphasized.”), 8.1 (“Advances in hydraulic fracturing of low permeability formations will have, perhaps, the greatest potential impact on the future development of the San Juan Basin.”), 8.1 to 8.3. However, it also noted that such methods were not currently technically or economically feasible for the Basin, but did not rule out their use in the future, once technology and economics rendered them viable. In preparing the FEIS, BLM thus generally took into account the potential future use of horizontal drilling and hydraulic fracturing to drill and develop the expected 9,942 wells, during the 20-year life of the RMP. See EA, Appendix C, at unp. 8 (“The RMP FEIS evaluated stimulation/hydraulic fracturing and flaring. Both of these completion techniques have been utilized in the planning area for decades.”).

Further, we are not persuaded that, in the EA, tiered to the FEIS, BLM failed to consider the likely environmental impacts specifically associated with the horizontal drilling and hydraulic fracturing now at issue. WildEarth does little to identify these impacts other than to assert that they concern air quality: “BLM’s failure to take a hard look at *air quality impacts* of the Middle Mesa POD . . . clearly stems from reliance on an outdated RFDS that did not consider the specific drilling technology proposed in the Middle Mesa POD.” NA/SOR at 21 (emphasis added); see *id.* at 3, 18-21.

It is undisputed that the 53 wells and associated facilities do not cause drilling and development to exceed what was envisioned in the RFDS. See BLM Answer at 5 (“[BLM] is still within the number of wells projected by the RFDS and analyzed in the 2003 RMP.”), 6 (“Since the implementation of the 2003 RMP, 3,722 wells have been spud in the [Planning Area].”), 28 (“[T]he RFDS anticipated that during the 20-year analysis period, 4,108 Dakota-Mancos gas wells would be drilled. . . . The 5[3] . . . Mancos wells described in the POD are well within the projected 4,108 wells.”); DR at 7 (“The 53 horizontal wells proposed are within the forecasted 4,108 wells.”); EA at 5. Thus, the FEIS must be deemed to have generally considered the likely

significant impacts of the drilling and development of the 53 wells. See NA/SOR at 20 (“BLM’s reliance on the RFDS, at least as an indicator of surface disturbance, may be reasonable.”). The question is whether, in doing so, the FEIS failed to consider any particular likely significant impact of drilling and developing the 53 wells. WildEarth states that air quality impacts fit that bill. See *id.* (“[W]ith regard [to] other potentially significant environmental impacts, and in particular air quality impacts[,] . . . such reliance is not reasonable because there is no comparable analysis of air quality impacts from horizontal drilling in the RFDS or RMP FEIS.”).

However, we think that all the evidence supports the fact that the air quality impacts of drilling and developing underground formations, whether it be the Dakota, Mancos Shale, or any other formation, are *associated with the operation of above-ground well sites and associated facilities*. Nowhere do we find any evidence that air quality impacts are associated with below-ground drilling and production. Thus, we fail to see how any change in below-ground drilling and production, whether it be vertical drilling or horizontal drilling, together with hydraulic fracturing, is likely to alter the air quality impacts from what was analyzed in the FEIS.

WildEarth offers no convincing argument or supporting evidence for the proposition that horizontal drilling and hydraulic fracturing have any impact on air quality beyond that considered in the EA, tiered to the FEIS. At best, it notes that “information in the record . . . shows that air emission, particularly greenhouse gas emissions, from horizontally drilled shale gas wells are *higher* than vertical wells.” NA/SOR at 19 (emphasis added). It points to a Draft Staff Paper, entitled “Shale-Deposited Natural Gas: A Review of Potential,” which had been prepared by Leon D. Brathwaite, Electricity Analysis Office, Electricity Supply Analysis Division, California Energy Commission (Brathwaite Paper), which stated that “running the required equipment and pumps [for drilling, completing, and producing (by hydraulic fracturing) a horizontal well, as opposed to a vertical well,] produces *more* emissions.” *Id.* (quoting Brathwaite Paper at 26) (emphasis added). In addition, WPX admits that drilling and development in the Mancos Shale formation will occur at a lower depth than the wells envisioned in the RFDS, “which may in some circumstances . . . equate to longer drilling time and hence *more* air emissions.” Answer at 24-25 (emphasis added). However, nowhere does WildEarth attempt to quantify “higher” or “more” emissions. Thus, at no time does it establish that emissions will exceed the emissions envisioned in the EA, tiered to the FEIS, to the point that air quality impacts are likely to appreciably change from what was considered in the EA, tiered to the FEIS. Thus, we agree with BLM that, “[b]ecause the level of activity and oil and gas development for the alternatives [considered in the EA] are consistent with those levels predicted in the RFDS, the potential air quality impacts of the alternatives *are included in the FEIS* and were considered in the ROD[.]” EA at 51 (emphasis added).

BLM would clearly be required to supplement the FEIS were the new drilling and production method now adopted, which was not generally in practice in the San Juan Basin, owing to technical and economic impediments, at the time of preparation of the FEIS, likely to cause new or greater significant air quality or other impacts. Were technological improvements to have outstripped the assumptions underlying the environmental analysis, entailing new or greater significant impacts than those envisioned at the time of preparation of the FEIS, BLM could not simply proceed on the basis of the FEIS. *See Wyoming Outdoor Council*, 176 IBLA at 41. However, nowhere has WildEarth demonstrated that there are likely to be any such impacts, which must be considered in a supplemented FEIS.

We are, thus, not persuaded that BLM, in approving the POD, violated section 102(2)(C) of NEPA.

*Whether BLM's Decision to Approve the POD Violated Section 202(c) of FLPMA*

[5] WildEarth argues BLM failed to adequately consider the effects of VOC and other gaseous emissions on air quality, claiming BLM violated its substantive obligation under section 202(c) of FLPMA “to ensure compliance with [S]tate and [F]ederal air quality standards[.]” NA/SOR at 21.

Section 202(c) of FLPMA governs “the development and revision of land use plans,” directing the Secretary of the Interior to satisfy certain requirements in meeting that task, including, under subsection (c)(8), “provid[ing] for compliance with applicable pollution control laws, *including State and Federal air, water, noise, or other pollution standards or implementation plans[.]*” 43 U.S.C. § 1712(c) (2006) (emphasis added).

BLM is not here adopting a land-use plan. BLM previously adopted a land-use plan that provides for compliance with State and Federal air quality standards. *See* ROD at 13; RMP at 2-22. Further, BLM is required to conform its approval of management actions under that plan to the dictates of the RMP. *See* 43 U.S.C. § 1732(a) (2006); 43 C.F.R. § 1610.5-3(a); *e.g.*, *Dona Jeanette Ong*, 165 IBLA 274, 278 (2005) (citing *Norton v. Southern Utah Wilderness Alliance*, 542 U.S. 55, 69 (2004)). In approving oil and gas drilling and development and taking other management actions under the RMP, BLM must ensure that there will be compliance with State and Federal air quality standards, established by law. *See* 43 C.F.R. § 3480.0-6(a), (b), and (d).

WildEarth fails to provide evidence showing that any noncompliance is likely to occur in the reasonably foreseeable future from the drilling and development of the 53 wells. WildEarth does not allege that any noncompliance with State or

Federal air quality standards has occurred, resulting in actionable conduct by BLM violative of its duty under section 202(c) of FLPMA, and we will not assume that BLM will fail to comply with any State or Federal air quality standard. We have long recognized that BLM may properly rely on the fact that permitting and enforcement of the Act by the State, acting through the NMED, subject to oversight by the EPA, *will ensure that the approved activity does not exceed or violate any State or Federal air quality standard.* See Proposed RMP and FEIS, Volume I, at 2-11 (“The New Mexico Air Quality Bureau (NMAQB) is responsible for enforcing the state and national ambient air quality standards in New Mexico.”), 2-12 (“Air quality will be examined in conjunction with the NMAQB, following applicable permit procedures.”), 3-52 to 3-53; EA at 9, 23; e.g., *Edwardsen v. U.S. Department of the Interior*, 268 F.3d 781, 789 (9th Cir. 2001); *Davis v. Slater*, 148 F. Supp. 2d 1195, 1214 (D. Utah 2001), *rev’d on other grounds*, 302 F.3d 1104 (10th Cir. 2002) (“[I]t is entirely reasonable, when evaluating the possible environmental impacts of a project, for an agency to assume necessary compliance with permitting standards regarding permits which the project must have in order to go forward.”); *Powder River Basin Resource Council*, 180 IBLA 32, 57 (2010) (“BLM need not evaluate the potential environmental consequences resulting from noncompliance with Federal and State permitting requirements or assume that violations of Federal and State standards will inevitably occur”); *Wyoming Outdoor Council*, 176 IBLA at 27 (“[I]n approving the Project, BLM properly assumed that emissions would be regulated, and, if necessary, controlled so as to satisfy both Federal and State air quality standards.”), 30 (“In assessing the potential significant environmental impacts in the EIS, BLM properly relied upon the adequacy of State enforcement to ensure that no CAA violation occurs.”). In addition, as WPX properly states: “Appellants should raise their legal arguments via litigation with EPA or the State of New Mexico Environment Department in a separate action if they seek enforcement of existing regulation.” Answer at 29.

For these reasons, we do not find that BLM, in approving the POD, violated section 202(c) of FLPMA, by failing to ensure compliance with any State or Federal air quality standards.

WildEarth has not preponderated in showing that BLM erred as a matter of fact or law in approving the POD. We, therefore, conclude that, in his November 2012 decision, the Associate Deputy State Director properly upheld the District Manager’s December 2011 DR and FONSI, authorizing the drilling and development of 53 natural gas wells in the Mancos Shale formation in the San Juan Basin of northern New Mexico.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the decision appealed from is affirmed.

\_\_\_\_\_/s/\_\_\_\_\_  
Christina S. Kalavritinos  
Administrative Judge

I concur:

\_\_\_\_\_/s/\_\_\_\_\_  
James F. Roberts  
Administrative Judge